



STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

Washington State Energy Code Development Standard Energy Code Proposal Form

Jan 2022

Log No. 21-GP3-012

Code being amended: ☒ Commercial Provisions ☐ Residential Provisions

Code Section # C404.2.1

Brief Description:

Delete section C404.2.1 (heat pump water heating mandate) in entirety. This newly added section of the 2021 WSEC-C did not exist in the previous 2018 edition.

Proposed code change text: (Copy the existing text from the Integrated Draft, linked above, and then use underline for new text and ~~strikeout~~ for text to be deleted.)

~~**C404.2.1 Service water heating system type.** Service hot water shall be provided by an electric air-source heat pump water heating (HPWH) system meeting the requirements of this section. Supplemental service water heating equipment is permitted to use electric resistance or fossil fuel in compliance with Section C404.2.1.4.~~

Exceptions:

- ~~1. 24 kW plus 0.1 watts per square foot of building area of electric resistance service water heating capacity is allowed per building.~~
- ~~2. Solar thermal, wastewater heat recovery, other approved waste heat recovery, ground source heat pumps, water-source heat pump systems utilizing waste heat, and combinations thereof, are permitted to offset all or any portion of the required HPWH capacity where such systems comply with this code and the Uniform Plumbing Code.~~
- ~~3. Systems that comply with the Northwest Energy Efficiency Alliance (NEEA) Commercial Electric Advanced Water Heating Specification.~~
- ~~4. Service hot water systems served by a district energy system that serves multiple buildings and that was in service before the effective date of this code.~~
- ~~5. Commercial dishwashers, commercial food service equipment, and other approved process equipment are permitted to utilize electric booster heaters for supply water temperatures 120°F (49°C) or higher.~~
- ~~6. Systems connected to a low-carbon district energy exchange system or a low-carbon district heating and cooling or heating only system.~~
- ~~7. Essential facilities. Groups I-2 and I-3 occupancies that by regulation are required to have in place redundant emergency backup systems.~~

Purpose of code change:

This proposal begins to remedy conflicting provisions in the WSEC-C that are preempted by federal law (EPCA).

The sole purpose of section C404.2.1 is to mandate heat pump water heating appliances thus prohibiting covered products (42 U.S.C. § 6295) in direct violation with the EPCA. Furthermore, the WSEC-C recognizes the need for supplemental heat due to limitations of heat pump technology, yet only provides limited exceptions for electric resistive water heating, but not gas water heating appliances (covered product per 42 U.S.C. § 6295).

For any covered product, “EPCA, 42 U.S.C. § 6297(c), expressly preempts State and local regulations concerning the energy use” California Restaurant Ass'n v. City of Berkeley (9th Cir. 2023).

Your amendment must meet one of the following criteria. Select at least one:

- | | |
|---|--|
| <input type="checkbox"/> Addresses a critical life/safety need. | <input checked="" type="checkbox"/> Consistency with state or federal regulations. |
| <input type="checkbox"/> The amendment clarifies the intent or application of the code. | <input type="checkbox"/> Addresses a unique character of the state. |
| <input type="checkbox"/> Addresses a specific state policy or statute.
(Note that energy conservation is a state policy) | <input type="checkbox"/> Corrects errors and omissions. |

Check the building types that would be impacted by your code change:

- | | | |
|--|--|---|
| <input type="checkbox"/> Single family/duplex/townhome | <input checked="" type="checkbox"/> Multi-family 4 + stories | <input checked="" type="checkbox"/> Institutional |
| <input type="checkbox"/> Multi-family 1 – 3 stories | <input checked="" type="checkbox"/> Commercial / Retail | <input checked="" type="checkbox"/> Industrial |

Your name	Gregory Johnson	Email address	gregory.johnson@avistacorp.com
Your organization	Avista Corporation	Phone number	509-495-4928
Other contact name	Click here to enter text.		

Economic Impact Data Sheet

Is there an economic impact: ☐ Yes ☒ No

Briefly summarize your proposal's primary economic impacts and benefits to building owners, tenants, and businesses. If you answered "No" above, explain your reasoning.

In reference to the currently in force 2018 WSEC-C, there is zero economic impact as this proposal rolls back changes that the 2021 WSEC-C would have imposed. This proposal averts any cost increases that this section of the 2021 WSEC-C would have created.

Provide your best estimate of the **construction cost** (or cost savings) of your code change proposal? (See OFM Life Cycle Cost [Analysis tool](#) and [Instructions](#); use these [Inputs](#). [Webinars on the tool can be found Here](#) and [Here](#))

\$0 /square foot (For residential projects, also provide **\$0 / dwelling unit**)

Show calculations here, and list sources for costs/savings, or attach backup data pages

Provide your best estimate of the **annual energy savings** (or additional energy use) for your code change proposal?

0 KWH/ square foot (or) 0 KBTU/ square foot

(For residential projects, also provide **0 KWH/KBTU / dwelling unit**)

Show calculations here, and list sources for energy savings estimates, or attach backup data pages

In reference to the currently in force 2018 WSEC-C, there is zero energy impact as this proposal rolls back changes that the 2021 WSEC-C would have imposed.

List any **code enforcement** time for additional plan review or inspections that your proposal will require, in hours per permit application:

Zero impact to plan review or inspection time or process.

Small Business Impact. Describe economic impacts to small businesses:

This proposal averts any cost increases that this section of the 2021 WSEC-C would have created. Zero small business impact in relation to the currently in force 2018 WSEC-C.

Housing Affordability. Describe economic impacts on housing affordability:

This proposal averts any cost increases that this section of the 2021 WSEC-C would have created. Zero housing affordability impact in relation to the currently in force 2018 WSEC-C.

Other. Describe other qualitative cost and benefits to owners, to occupants, to the public, to the environment, and to other stakeholders that have not yet been discussed:

Reduces legal risk and uncertainty to building officials, municipalities, and the state related to conflicting provisions in this code that are preempted by federal law.